

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/028001 A1

(51) International Patent Classification⁷:
I/34, G01N 21/21

A61M 1/14,

(74) Agents: BERGLUND, Stefan et al.; Bjerkéns Patentbyrå
KB, Östermalmsg. 58, S-114 50 Stockholm (SE).

(21) International Application Number:

PCT/SE2004/001313

(22) International Filing Date:

13 September 2004 (13.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0302520-2 23 September 2003 (23.09.2003) SE
60/505,762 26 September 2003 (26.09.2003) US

(71) Applicant (for all designated States except US): GAM-
BRO LUNDIA AB [SE/SE]; Magistratsvägen 16, P.O.
Box 10101, S-220 10 Lund (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HALLSTADIUS,
Hans [SE/SE]; Vapenkroken 28, S-226 47 Lund (SE).
BERTINSSIN, Gert-Inge [SE/SE]; Nyckelkroken 22,
S-226 47 Lund (SE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

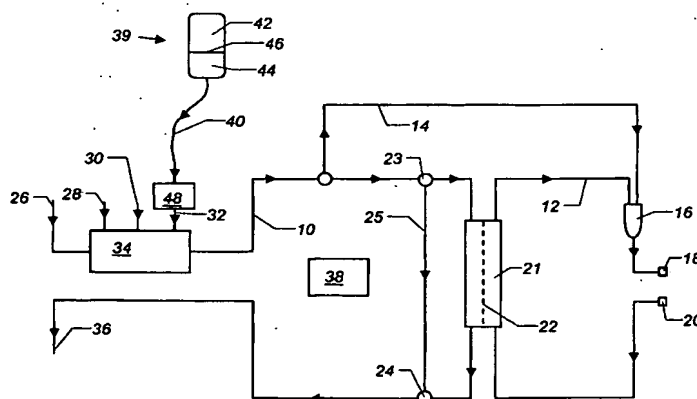
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: AN APPARATUS, A SYSTEM AND A METHOD RELATING TO HEMODIALYSIS, HEMODIAFILTRATION, HEMOFILTRATION OR PERITONEAL DIALYSIS



(57) Abstract: The invention relates to an apparatus for hemodialysis, hemodiafiltration, hemofiltration or peritoneal dialysis. The apparatus comprises at least one conduit (10, 14) in which a dialysis and/or infusion fluid is intended to flow. The apparatus has a measurement unit (48) for measuring at least one optically active substance in the fluid. The measurement unit (48) is arranged to measure the concentration of the substance in said fluid by measuring the influence said substance in the fluid has on a polarised beam of light which is transmitted through said fluid. The invention also concerns a system including such an apparatus as well as a method of carrying out a measurement of the concentration of an optically active substance in a dialysis and/or infusion fluid.

WO 2005/028001 A1